查询HMC157C8供应商

GaAs MMIC SMT FREQUENCY DOUBLER 1 - 2 GHz INPUT

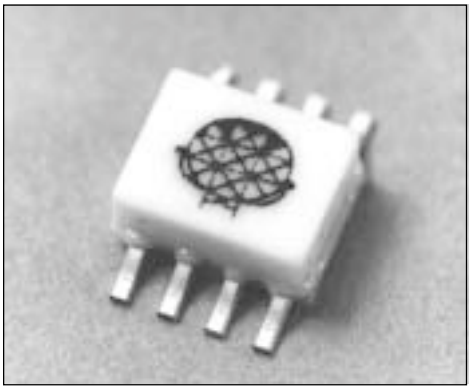
FEBRUARY 2001 V01.0700

Features

CONVERSION LOSS: 17 dB

Fo, 3Fo, 4Fo ISOLATION: > 35 dB

INPUT DRIVE LEVEL: 10 to 20 dBm



General Description

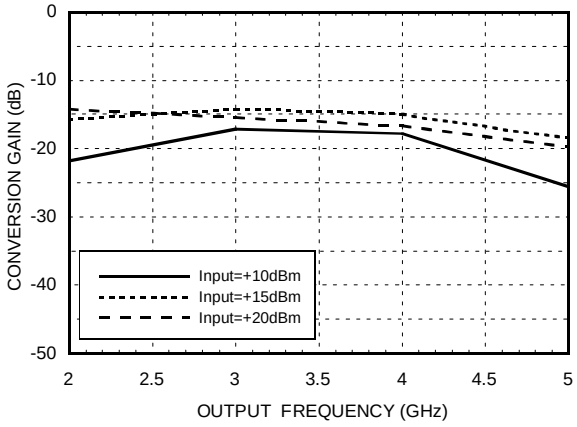
The HMC157C8 is a miniature frequency doubler in a non-hermetic ceramic surface mount package. Suppression of undesired fundamental and higher order harmonics is 32 to 60 dB with respect to input signal level and 15 to 43 dB with respect to the desired output signal level. The doubler uses the same diode/balun technology used in Hittite MMIC mixers, features small size and requires no DC bias.

Guaranteed Performance, *50 Ohm system -55 to +85 deg C*

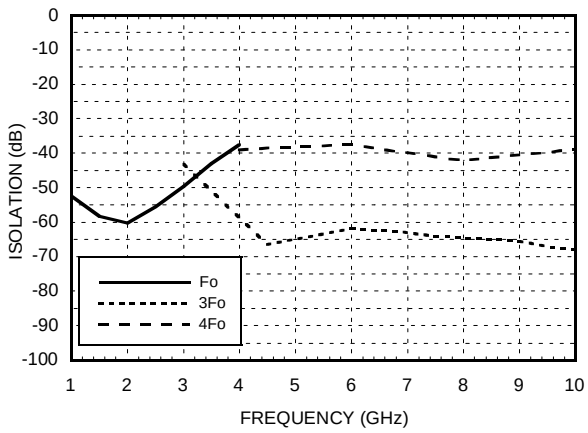
Typical Performance vs. Drive Level				
	10	15	20	dBm
Input Frequency Range	1.5 - 2.0	1.0 - 2.0	1.0 - 2.0	GHz
Output Frequency Range	3.0 - 4.0	2.0 - 4.0	2.0 - 4.0	GHz
Conversion Loss	<20	<17	<18	dB

Performance for Input Signals in the 1.0 - 2.0 GHz Band (+15dBm Drive)				
	Min.	Typ.	Max.	
Fo Isolation (with respect to input level)	42	50		dB
3Fo Isolation (with respect to input level)	40	50		dB
4Fo Isolation (with respect to input level)	30	35		dB

Conversion Loss vs. Drive Level

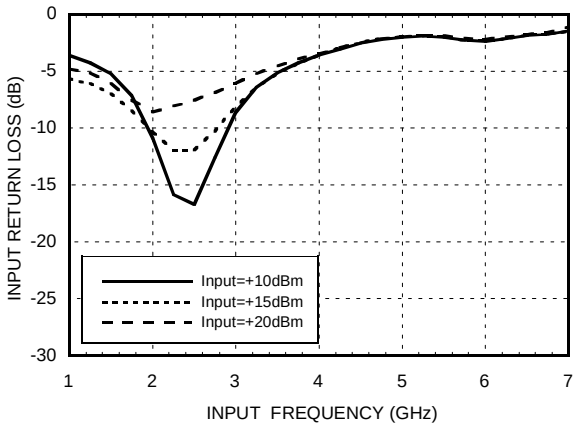


Isolation @ +15 dBm Drive Level *

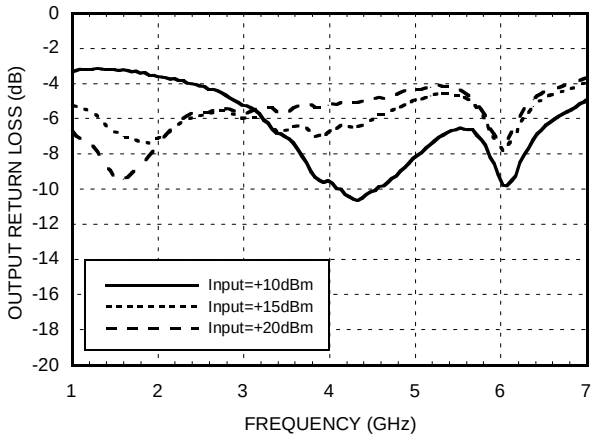


** With respect to input level*

Input Return Loss vs. Drive level



Output Return Loss vs. Drive Level



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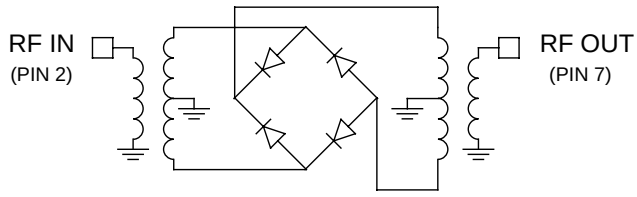
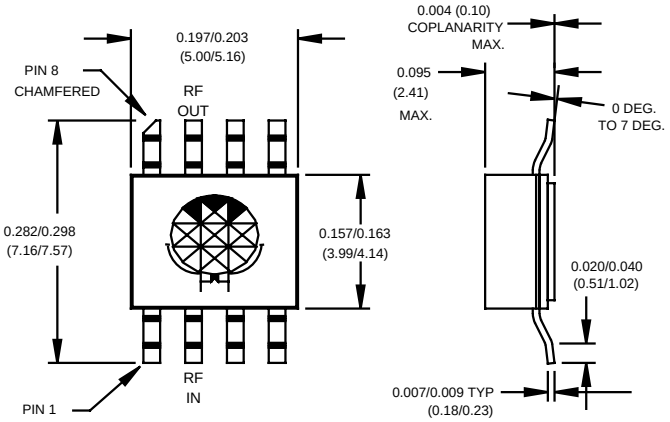
Schematic

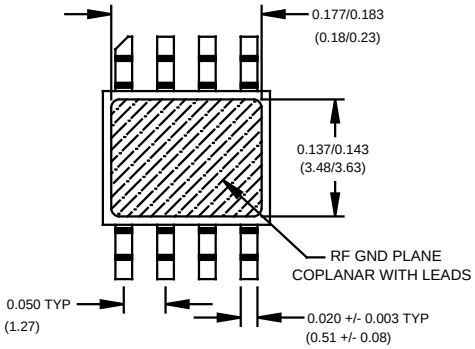


Absolute Maximum Ratings

Input Drive	+27 dBm
Storage Temperature	-65 to +150 deg C
Operating Temperature	-55 to +125 deg C

Outline Drawing





1. MATERIAL:
   A) PACKAGE BODY & COVER : WHITE ALUMINA (92%)
   B) LEADS & PACKAGE BOTTOM: COPPER
2. PLATING : ELECTROLYTIC GOLD 100 - 200 MICROINCHES OVER ELECTROLYTIC NICKEL 100 TO 200 MICROINCHES.
3. DIMENSIONS ARE IN INCHES (MILLIMETERS).
   UNLESS OTHERWISE SPECIFIED TOL. ARE ±0.005(±0.13).
4. ALL UNLABELED LEADS ARE GROUND. THESE LEADS ARE CONNECTED INTERNALLY TO THE PACKAGED BOTTOM GROUND. THE PACKAGE BOTTOM RF GROUND **MUST** BE SOLDERED TO THE PCB RF GROUND.
5. PACKAGE LENGTH AND WIDTH DIMENSIONS SHOWN DO NOT INCLUDE LID SEAL PROTRUSION. ALLOWABLE PROTRUSION SHALL BE 0.005 (0.127MM) PER SIDE.

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NOTES: